Hospital Shared Services

Date:_____ Asset _____

Location:_____ SR #:_____

Customer:_____ Technician:_____
Signature Signature

Custom Ultrasonic Routine Maintenance Procedures:	CUS-1001

To maintain your System 83 Plus in optimal condition, routine maintenance procedures must be performed on a quarterly basis. The routine maintenance procedures must be performed by a qualified Biomedical Engineer or Maintenance Engineer.

For further information regarding the qualifications for performing the maintenance procedures, or to address questions regarding the procedure, contact Custom Ultrasonics, 215-364-1477.

To Begin Maintenance Procedure:

- ❑ Turn the hot and cold water valves OFF using either the shut off valves or the faucet handles. Start the system in a wash cycle to relieve the water pressure. Be sure to note the settings of the VALVES, and return the VALVES to the same setting at the completion of the Maintenance Procedure.
- ❑ Turn the system off by moving the CIRCUIT BEAKER to the "OFF" position on both the computer module and the System.
- ❑ Disconnect the AC plug(s) from the wall receptacle(s).
- ❑ Remove the front panel(s) by removing the screw at the lower center of the white panel(s).
- ❑ Move the System(s) away from the wall.
- ❑ Remove the rear panel(s) by turning the screw(s) at the perimeter of the white panel(s).
- ❑ Inspect interior of the system for visible liquid leakage. If leakage is apparent, locate the source of the leak(s) and repair.
- ❑ Disconnect the hot and cold water line(s) from the System. Check filter screens and hoses for wear. Replace as needed. After inspection, reconnect to the System. DO NOT TURN ON THE WATER VALVES YET.
- ❑ Clean all the solenoid housings and diaphragms per instructions in the BIOMEDICAL MANUAL:

A. H/L/D Feed Solenoid
B. H/L/D Return Solenoid
C. Drain Solenoid
D. Residual Drain Solenoid
E. Water Inlet Solenoid
F. Hand Spray Solenoid
G. Air Solenoid
H. Detergent Solenoid

- ❑ Remove the four (4) wing nuts from the drain pump(s) and chemical pump(s). Inspect impellers for foreign objects. Clean and reassemble. Be certain that the wing nuts are secure.

- ❑ Check all the compression fittings for the purge pump(s), residual drain, and air pump(s) and detergent pump.

- ❑ Check hand spray tubing, handle and fittings for leakage and wear.

- ❑ Check Plumbing unions in the chemical feed, return, and drain lines

- ❑ Check purge pump(s) to the counter top manifold(s) to insure coil is secure (see BIOMEDICAL MANUAL).

- ❑ Check military connector to ultrasonic generator(s) from transducers on the bottom of the ultrasonic chamber(s). Check the ground lug on the transducer plate(s) located next to the gray shielded cable to the generator(s).

- ❑ Clean the front and rear louvers of the generator enclosure(s).

- ❑ The interface is located below the shelf on the right side of the cabinet. Check and secure all four (4) plugs.

- ❑ Check the drain and residual drain hoses for wear at the site of the standpipe.

- ❑ Check the movement of the circuit breaker and inspect the hospital grade plug(s).

- ❑ Two floats are located behind the metal cover in the scope processing chambers(s). Check and clean the shafts of the floats.

- ❑ Locate the float in the chemical reservoir(s). Check and clean the shaft of the float.

- ❑ At the lower rear of the scope processing chamber(s), locate and remove the filter screen from behind its housing and clean. Replace screen in the housing and ensure the screen is fully secured behind and within the housing.

- ❑ Reconnect the System(s) AC plug(s) to the wall receptacle(s).

- ❑ Replace any water filters before turning machine back on (Refer to Filter change section in the BIOMED MANUAL). Turn "ON" the hot and cold water faucet(s) and reset the valves to their original positions.

- ❑ Connect the AC plug(s) from the computer and the System into the wall receptacle(s), and engage the CIRCUIT BREAKERS.

- ❑ Turn the computer "ON".

- ❑ Remove the hand spray from its holder or insert the hand spray into the bulkhead, dependent on your System, and turn "ON" the rinse SWITCH (on the control panel). Fill the chemical reservoir(s) to a level above the LOW LEVEL MARK located on the wall of the chamber(s) (disregard the digital readout on the control panel).

- ❑ Beginning from the top, insert any three (3) endoscope adapters.

- ❑ Enter the STANDARD PROGRAM SCREEN and press F2, system data, in order to check the chemical time. Follow the screen prompt to return to STANDARD PROGRAM SCREEN.

- ❑ Move all switches on the control panel, except the heater switch, to the "DOWN" position.

- ❑ Measure water temperature, it should read around 110° Fahrenheit.

- ❑ Press F8, "WASH & H/L/D". Run a complete wash/disinfect cycle and at the same time, check for any liquid leakage.

- ❑ At completion of the MAINTENANCE PROCEDURE, press F2, System data. Return the chemical period to its original setting.

- ❑ Replace the front and rear panels.

- ❑ Position the system into its original location making certain that all hoses are in position and that they are not kinked.

- ❑ Confirm completion of the ROUTINE MAINTENANCE PROCEDURE to the department supervisor and document accordingly. Mail Routine maintenance cards to Custom Ultrasonics. Department staff may now refill the chemical reservoir(s) and start using machine.

NOTE: Every six (6) months, remove the sensor (resembles a spark plug) from the PVC tee which is located before the input of the drain pump(s). Clean and reassemble using teflon tape. Do not over tighten and break PVC tee. Make certain that the low voltage line to the sensor and ground are secure.